

is present in nearly all examples. Fringes colored as in primaries, paler basally, and sometimes tinged with brown. Discal dots dusky, oval, very faint. Beneath silvery gray, dusted with black atoms. On primaries these are heaviest along costa and at outer margin. Extra discal, if present, is not prominent. Discal dots small, white. Intervenular dots at margin reproduced as above, but all white. Marginal line hardly apparent. Secondaries have extra-discal strongly reproduced, black, heavier toward inner margin and much more serrate than above, externally bordered with white. Discal dots large, oval, jet black, frequently pupilled with white.

Type: male and female from Eureka, Utah, May 21, 1909, with co-types. Thirteen males and 5 females are retained in my own collection. The latter from same locality taken in 1909 and 1910 with the exception of one male from Stockton, Utah, August 3, 1902, referred to previously. This may represent a fragmentary second brood at that period. The rest of my co-types were captured between May 7 and June 14. As grouped they present a marked contrast in black and gray to *modestus*, *peplaroïdes* and *giganteus*, with their rusty browns and reddish hues.

The genitalia as shown in the figure differ a little from those of *modestus*, but seem to me even shorter and broader.

THE OCCURRENCE OF THE MYMARID GENUS MYMAR HALIDAY IN NORTH AMERICA.

BY A. A. GIRAULT,

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The type genus of the family Mymaridæ has been found to occur in England, Germany, Austria, perhaps Italy in Europe and from the islands of Saint Helena (Africa) and Ceylon (Asia; *Mymarilla* Westwood), but has never been recorded as occurring in the western hemisphere. However, I have found in the collections of the United States National Museum a single tag-mounted female specimen of a species of the genus from Pennsylvania, which I have been fortunate in transferring without injury to a slide mount of xylol-balsam. The specimen is excellently preserved and represents a typical species of the genus, the fore wings with long, slender petioles, the small, paddle-like blade portion at the apex with very long, delicate marginal cilia,

the apical half of the blade portion clouded and the venation absent; the posterior wings are aborted, without a blade, merely like a stiff, thick bristle, long and slender but very much shorter than the fore wings. The second funicle joint of the antenna is abruptly very long and slender and the scape is unusually long and slender as with this genus.

This North American species seems to resemble very closely *Mymar pulchellum* Curtis, but according to Foerster's (1847) description of the latter differs from it in having the second funicle joint of the antennæ much longer (11 or more times) than the third funicle joint, whereas in female *pulchellum* "das 1ste Glied der Geißel ist etwas länger als das Stielchen, das 2te und 3te dagegen sehr stark verlängert, fast von der Grösse des Schaftes, das 3te aber ist immer noch ein wenig länger als das 2te, die 3 folgenden Glieder sind wieder sehr kurz." Westwood (1879) gives a figure of the male of *pulchellum* and says of the female: "This insect has . . . antennæ . . . 9-jointed in the female, with the fourth joint remarkably elongated and slender"; from which it may be inferred that the other joints are comparatively short. The figure (male) shows a longer blade portion of the fore wing than is the case with the American specimen and Westwood's remarks on the species *pulchellum*, not agreeing by inference with Foerster's descriptions, would lead to the belief that his specimens represent a distinct species. As species of Mymarids are more numerous than is generally supposed, I can see no reason why this should not be the case, especially since Westwood captured his specimens at large and did not identify them by actual comparison. The same, I think, may be said of Foerster's specimens, as the following would lead one to infer.¹

Through the kindness of Dr. L. O. Howard I have been enabled to see Curtis' (1832) description and figure of *M. pulchellum* which agree with the specimen before me but not with Foerster's description of the species. Curtis' figures appear to be excellent ones and my specimen agrees with them as previously stated; only the short rows of discal cilia in the cephalo-distal portion of the blade, cephalad of the longitudinal row of cilia running the blade's entire middle length, are not shown or indicated to be present. The antennæ agree as

¹ Foerster's specimens are more probably different from *pulchellum* than Westwood's since the latter's specimens agree better with Curtis' figure.

closely as can be expected and although the tarsi in the figures are shown to be five-jointed in some instances, hence the proximal joint not comparatively long and slender, it is quite evident to me that in this respect a mistake was made, the proximal joint of the tarsi being divided in the figures or else the distal joint extended to indicate claws and pulvillus. So although my specimen differs perhaps in having two short rows of discal ciliation in the cephalic outer portion of the paddle-like wing blade² and also in having a longer proximal tarsal joint, nevertheless the likeness to the figures and description is so striking and feels so true that I give up my former intention of describing this species as new, substituting my impression that it is identical with *Mymar pulchellum* Curtis. This is the first European species of Mymaridæ to be found in North America.³

The following descriptive notes were made from the specimen in my possession, given especially for the reason that we may have a distinct species here after all, and that my identification may be wrong:³

Female.—Length, 0.90 mm., slender, visible to naked eye with difficulty; the species described and figured by Curtis excepting as may be pointed out. Body uniformly gamboge, the eyes dark reddish, the abdomen with a large fuscous area distad. Legs and antennæ uniformly lighter, the club of antennæ fuscous, the distal tarsal joints dusky. The figure given by Curtis shows some greenish on the thorax and bluish on the head not present here but which may be ascribed to the drawing.

Legs slender, the tarsi 4-jointed, the joints long, the proximal joint lengthened, twice the length of the distal joint, a third longer than the second joint. Strigil present on cephalic legs. Ovipositor not exerted. Parapsidal furrows complete. No apparent sculpture or pubescence.

Petiole of abdomen two-thirds the length of the body of abdomen, nearly twice longer than the short, obconic caudal coxæ; trochanters 2-jointed. Tibial spurs single. Vertexal carina present.

Fore wings longer than the body, petiolate, the petiole very long, uniformly slender, like a thick hair, as long as the body, distinctly more slender than the petiole of the abdomen, clothed along each edge with short, minute spines pointing distad and separated from each other in the line for some distance (distal two-thirds of the wing petiole); at the end of this long petiole is a comparatively small wing blade, slightly over a third as long as

² Probably omitted by Curtis, inadvertently.

² I will give evidence elsewhere, showing that the species is new, however. It may be called *Mymar venustum*. Its characteristics will be given later.

³ See previous footnote.

the whole, its cephalic margin a continuation of the petiole, straight but curving around the apex, the caudal margin a long, sloping convexity; the blade is paddle-shaped, not quite one-half distad is deeply fumated (smoky brown); the fumated area with its proximal margin oblique, running from the costal edge disto-caudad. The discal ciliation of the blade consists of a single longitudinal line of moderately long cilia running through about the middle of the blade, but cephalad of the middle, terminating some distance before the sharp base of the blade; the cilia become somewhat more crowded and longer distad and the line runs to the apex; in the distal two-thirds of the fumated area, cephalad of the distal third of the long, nearly central line, there are two short lines of discal cilia running to the apical margin, the cephalic one shorter (about 3 to 6 cilia), the caudal one slightly longer (about 5 to 7 cilia); both lines may be somewhat confused in which case a third short line is indicated; around the blade margins is a row of fine discal cilia; also of marginal cilia which are fine but distinct, projecting out between the long primary marginal ciliation; these secondary marginal cilia are subequal in length to the true discal cilia; disk of blade free from cilia caudad of the nearly central row. Marginal cilia very long, slender, graceful, equal at both margins, somewhat shorter around the apex, about $2\frac{1}{2}$ times longer than the greatest width of the blade, about as long as the scape and pedicel combined.

Posterior wings aborted, without a blade, merely a comparatively long, acuminate bristle-like appendage, by far not reaching half-way to the base of the blade of the fore wing, distinctly shorter than the scape, about a third of the length of the petiole of the fore wing (excluding blade).

Bulb of scape short; scape very long, curved somewhat, slenderer in the middle, slightly shorter than the second funicle joint, about four times the length of the pedicel and twice or more the length of the club, distinctly thickened at each end; pedicel obconic, usual, distinctly longer than wide, slightly shorter than the proximal funicle joint; the latter slender, about five times longer than wide, longer than any of the funicle joints except the second, shorter than the club by about one-half; second funicle joint abruptly very long and slender, subequal in length to the combined lengths of the other five funicle joints, very slightly thickened distad, rod-like, the proximal funicle joint rod-like; third and fourth funicle joints abruptly very short, cylindrical ovate, not as long as pedicel, subequal to each other; funicle five a fourth longer, six a fourth longer than five and distinctly thicker, somewhat shorter than the pedicel. Club slightly larger, slender ovate, longer than funicle joints four, five and six combined. Pubescence soft, short, moderate, not conspicuous.

(From a single specimen, $\frac{2}{3}$ -inch objective, 1-inch optic, Bausch and Lomb.)

The foregoing notes were made from a single female specimen in the collections from the United States National Museum, Washington, D. C., formerly on a tag labelled "Greensbrg., Pa., Jly. 3-05,"

now in the same collection mounted on a slide in xylol-balsam (temporarily in my possession).

LITERATURE REFERRED TO.

1832. CURTIS, JOHN. British Entomology; being illustrations and descriptions of the genera of insects, *etc.*, London, IX, p. 411 (2 pp.), pl. 411 (colored fig. adult female and 5 figs. of details—male, female antenna, mandible, fore leg and lateral aspect of the abdomen).
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A NEW CAMPONOTUS FROM CALIFORNIA.

BY WILLIAM MORTON WHEELER,

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Camponotus anthrax, new species.

Worker Major.—Length 7-9 mm.

Belonging to the *fallax* group. Head large, as broad as long, broader behind than in front, with broadly and feebly excised posterior border, rounded posterior corners and convex sides; in profile very convex above, flattened below. Eyes rather large, broadly elliptical, flat. Mandibles convex, 6-toothed. Clypeus feebly convex, ecarinate, its anterior border impressed in the middle, with a small but distinct notch. Antennal scapes not reaching the posterior corners of the head, slender and not flattened at the base, distinctly incrassated towards their tips. Thorax not longer than the head including the mandibles, and in front half as broad as the head; in profile feebly and rather evenly arcuate above, laterally compressed in the meso- and metapleural regions. Promesonotal suture very distinct; metanotum clearly outlined. Epinotum in profile with subequal base and declivity, forming together an obtuse angle, the former nearly horizontal, the latter slightly concave. Petiole nearly as broad and high as the epinotum, compressed antero-posteriorly, with blunt, rounded and entire border; its anterior and posterior surfaces both flat and the anteroposterior diameter the same above as below. Gaster elliptical, its dorsal surface distinctly flattened. Legs as usual, the fore femora slightly incrassated, the hind tibiæ broadly elliptical in cross-section, their surfaces neither flattened nor sulcate.

Head and mandibles shining, especially the cheeks, gula, posterior corners, vertex and occiput; clypeus and front more opaque through being